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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,684	01/10/2005	Hans-Georg Goebbel	263762US0PCT	9273
22850 7590 06/13/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER WITHERSPOON, SIKARL A	
			ART UNIT 1621	PAPER NUMBER
			NOTIFICATION DATE 06/13/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/519,684

Applicant(s)

GOEBBEL ET AL.

Examiner

Sikarl A. Witherspoon

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

The examiner has considered applicants' amendment filed April 24, 2007 and the arguments therein. The examiner has subsequently withdrawn the rejection(s) of record; however, the following new rejection is now being made.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 11-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 2,272,172) and Kaibel et al (US 5,939,589) in combination, and further in view of Brocker et al (US 6,150,564).

The instant claims are drawn to a process for preparing tetrahydrogeranylacetone by liquid phase hydrogenation of pseudoionone in the presence or a palladium-containing catalyst suspended through a device that inhibits the transport of catalyst particles.

Lee teaches a process for producing hexahydropseudoionone (tetrahydrogeranylacetone) by catalytic hydrogenation of pseudoionone using a suspended palladinized carbon as catalyst. The reaction is conducted at a temperature between 50 and 100° C (example 1).

The difference between Lee and the instant claims is that Lee does not expressly teach conducting the process in a reactor such that a device that inhibits the transport of catalyst particles is employed.

Kaibel et al teach a reactor for carrying out reactions, such as hydrogenations, wherein the catalyst is suspended in a liquid. The reactor contains orifices or channels of a diameter from 0.5 to 20 mm (abstract). The reactor may comprise a bed, a knitted fabric, a foam structure of plastic or ceramic, or any other known packing element. Preferably, the orifices or channels have surface roughness of 0.1 to 10 times the average particle size of the suspended catalyst (col. 2, lines 28 to 67).

Brocker et al teach a process for the selective liquid phase hydrogenation of compounds having multiple sites of unsaturated, i.e., alpha, beta-unsaturated carbonyl compounds, wherein the hydrogenation is carried out in a packed bubble column reactor, using a palladium or rhodium catalyst. Suitable packing materials include metallic materials, plastics, ceramics, and/ or inorganic fibers (col. 2, lines 12-67).

In light of the combined reference teachings, it would have been prima facie obvious to conduct a hydrogenation reaction of a poly-unsaturated carbonyl compound, using a reactor having a catalyst suspended through a device that inhibits transport of catalyst particles as taught in both references, especially since when the catalyst particles are slowed down and held up at the packing channel walls, an improvement in hydrodynamics is achieved, which enhances catalyst utilization (Brocker, col. 2, lines 22-28).

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***Response to Arguments***

Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikarl A. Witherspoon whose telephone number is 571-272-0649. The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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*Sikarl A. Witherspoon*  
SIKARL A. WITHERSPOON  
PRIMARY EXAMINER